BRUHAT BANGALORE MAHANAGARA PALIKE

MEASUREMENT SHEET

PRE-MEASUREMENT

Name of work:	Improvements of Drains, Roads and Covering Slab at Doddabommasandra in Ward No. 10 (Doddabommasandra), Vidyaranyapura Sub Division.
Estimated Cost :	Rs. 100.00 Lakhs
Head of Account :	P-0541 Emergency Reserve Fund
Job Code:	010-20-000064
Name of Agency:	Sri. K.B. Alankar, H No. 12, MSV Network Road, near Shoba Apartment, Amruthalli, Sahakaranagara Post, Bangalore - 560092.
Work order No:	BBMP/EE/BTP/WO/193/2020-21 D: 23.02.2021.
Measurement Continued on :	

Sl. No.	Description of work	No.	Length	Breadth B1	Breadth B2	Breadth Avg B	Depth	Quantity	Rate / Unit
1	Removing and resetting of footpath slab								Sqm
	1st main 2nd Across chamundeshwari lyt (Desilt)	2	30.00			0.90		54.00	
		2	30.00			0.90		54.00	
		2	5.20			0.90		9.36	
	Mla Narayanappa House road								
		2	30.00			0.75		45.00	
		2	30.00			0.75		45.00	
		2	30.00			0.75		45.00	
		2	30.00			0.75		45.00	
		2	14.60			0.75		21.90	
	2nd a c/s Ramakka Dasappa lyt								
		1	30.00			0.90		27.00	
		1	19.80			0.90		17.82	
	c/s road in 2nd c/s ramakka dasappa lyt								
		2	30.00			0.75		45.00	
		2	30.00			0.75		45.00	
		2	9.60			0.75		14.40	
	venugopalaswamy temple road								
		1	30.00			0.90		27.00	
		1	30.00			0.90		27.00	
		1	30.00			0.90		27.00	
		1	30.00			0.90		27.00	
		1	30.00			0.90		27.00	
		1	30.00			0.90		27.00	
		1	16.50			0.90		14.85	

ASSISTANT EXECUTIVE ENGINEER
Vidyaranyapura Sub-Division
Bruhath Bangalore Mahanagara Palike

645.33

Sl. No.	Description of work	No.	Length	Breadth			Depth	Quantity	Rate / Unit
				B1	B2	Avg B			
	Kalappa layout LHS								
		1	30.00			0.90		27.00	
		1	6.80			0.90		6.12	
	Kalappa lyt LHS1								
		1	30.00			0.60		18.00	
		1	31.10			0.60		18.66	
	Kalappa lyt RHS1								
		1	30.00			0.90		27.00	
		1	30.00			0.90		27.00	
		1	29.80			0.90		26.82	
								795.93	
								773.62	

Assistant Engineer
Ward No. 10

Assistant Executive Engineer
Vidyaranyapura Sub Division

Sl. No.	Description of work	No.	Length	Breadth B1	Breadth B2	Breadth Avg B	Depth	Quantity	Rate / Unit
	Measurement Continued on :								
2	KSRRB M300-1. Earth work excavation by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5m, excavated surface levelled and sides neately dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specification. MORTH / Chapter 3								
	For RCC Drain								Cum
	Bottom Raft								
	Mutturayaswamy Layout								
	1st A Cross from SWD								
		1	12.20			1.20	1.20	17.57	
	Continued length from Culvert								
		1	10.60			1.20	1.20	15.26	
		1	21.50			1.20	1.20	30.96	
	RHS								
		1	30.00			1.20	1.00	36.00	
		1	20.00			1.20	1.00	24.00	
	1st Main Road from 1st A Cross								
	LHS	1	30.00			1.20	1.00	36.00	
		1	26.00			1.20	1.00	31.20	
	Chamundeshwari Layout 2nd Cross								
	LHS	1	30.00			1.20	1.00	36.00	
		1	6.00			1.20	1.00	7.20	
	RHS								
		1	30.00			1.20	1.00	36.00	
	1st A Main from 1st Main								
	RHS	1	30.00			1.20	1.00	36.00	
		1	5.00			1.20	1.00	6.00	
	MLA Narayanappa House Road								
		1	12.40			1.20	1.00	14.88	
		1	30.00			1.20	1.00	36.00	
		1	30.00			1.20	1.00	36.00	
		1	16.80			1.20	1.00	20.16	
	for culvert								
	Murrurayaswamy Layout Main Road	1	4.30			2.00	1.20	10.32	
	Murrurayaswamy Layout 1st A Cross Roa	1	7.20			2.00	1.20	17.28	
	Venugopalswamy Temple Road	1	4.60			2.00	1.20	11.04	
								457.87	
								457.27	

Assistant Engineer
Ward No. 10

Assistant Executive Engineer
Vidyaranyapura Sub Division

ASSISTANT EXECUTIVE ENGINEER
Vidyaranyapura Sub-Division
Bruhath Bengaluru Mahanagara

Sl. No.	Description of work	No.	Length	Breadth B1	Breadth B2	Breadth Avg B	Depth	Quantity	Rate / Unit
	Measurement Continued on :								
3	KSRRB M2900- PCC 1:3:6 in Foundation KSRRB M2900-1. Plain cement concrete 1:3:6 mix with crushed stone aggregate 40 m nominal size mechanically mixed, placed in foundation and compacted by vibration including curing complete as per specifications MORTH Specification No.								Cum
	For RCC Drain								
	Bottom Raft								
	Mutturayaswamy Layout								
	1st A Cross from SWD								
	Continued length from Culvert	1	12.20			1.20	0.15	2.20	
		1	10.60			1.20	0.15	1.91	
		1	21.50			1.20	0.15	3.87	
	RHS								
		1	30.00			1.20	0.15	5.40	
		1	20.00			1.20	0.15	3.60	
	1st Main Road from 1st A Cross								
	LHS	1	30.00			1.20	0.15	5.40	
		1	26.00			1.20	0.15	4.68	
	Chamundeshwari Layout 2nd Cross								
	LHS	1	30.00			1.20	0.15	5.40	
		1	6.00			1.20	0.15	1.08	
	RHS								
		1	30.00			1.20	0.15	5.40	
	1st A Main from 1st Main								
	RHS	1	30.00			1.20	0.15	5.40	
		1	5.00			1.20	0.15	0.90	
	MLA Narayanappa House Road								
		1	12.40			1.20	0.15	2.23	
		1	30.00			1.20	0.15	5.40	
		1	30.00			1.20	0.20	7.20	
		1	16.80			1.20	0.20	4.03	
	for culvert								
	Murrurayaswamy Layout Main Road	1	4.30			2.00	0.20	1.72	
	Murrurayaswamy Layout 1st A Cross Roa	1	7.20			2.00	0.20	2.88	
	Venugopalswamy Temple Road	1	4.60			2.00	0.20	1.84	
								70.54	
								70.10	

Sweetha . N L
Assistant Engineer 3/03
Ward No. 10

Assistant Executive Engineer
Vidyaranyapura Sub Division

ASSISTANT EXECUTIVE ENGINEER
Vidyaranyapura Sub-Division
Bruhath Bengaluru Mahanagara P

Sl. No.	Description of work	No.	Length	Breadth B1	Breadth B2	Breadth Avg B	Depth	Quantity	Rate / Unit
	Measurement Continued on :								
5	KSRB 4-6.1: Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for foundations, footings, bases of columns for mass concrete including cost of all materials, labour complete as per specifications. Specifcation No. KBS 4.6.1 (P.No.16, I.No.4.28 of PW,P&IWTD SR 2018-19)								Sqm
	Bottom Raft								
	for culvert								
	Murrurayaswamy Layout Main Road	2	4.30				0.35	3.01	
	Murrurayaswamy Layout 1st A Cross Roa	2	7.20				0.30	4.32	
	Venugopalswamy Temple Road	2	4.60				0.30	2.76	
								10.09	
								10.00	

Suvitha - N L
Assistant Engineer
Ward No. 10
2/03

Assistant Executive Engineer
Vidyaranyapura Sub Division
Bruhath Bengaluru Mahanagara Palika

ASSISTANT EXECUTIVE ENGINEER

Sl. No.	Description of work	No.	Length	Breadth B1	Breadth B2	Breadth Avg B	Depth	Quantity	Rate / Unit
	Measurement Continued on :								
6	KSRB 4-6.4: Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for vertical surfaces such as walls at any thickness, including attached pilasters, buttresses, plinth and string courses cost of all materials, labour complete as per specifications. Specification No.KBS 4.6.2 (P.No.16, I.No.4.31 of PW,P&IWTD SR 2018-19)								Sqm
	Culverts								
	Murrurayaswamy Layout Main Road	4	4.30				0.75	12.90	
	Murrurayaswamy Layout 1st A Cross Roa	4	7.20				0.75	21.60	
	Venugopalswamy Temple Road	4	4.60				0.75	13.80	
								48.30	
								48.00	

Assistant Engineer
Ward No. 10

Assistant Executive Engineer
Vidyaranyapura Sub Division
Bruhath Bengaluru

Sl. No.	Description of work	No.	Length	Breadth B1	Breadth B2	Breadth Avg B	Depth	Quantity	Rate / Unit
	Measurement Continued on :								
8	Providing TMT steel reinforcement Fe500 for R.C.C work including straightening, cutting, bending, hooking, palcing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining memebrs wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications.								Tonne
	RCC Drain Dia 0.6*0.6*0.6	**No**	**L**	**Mtrs**		**Kg/m**	**Kgs**		
	10 mm	111	2.30	255.30		0.62	158.29		
	8 mm	20	12.20	244.00		0.39	95.16		
	10 mm	292	2.60	759.20		0.62	470.70		
	8 mm	20	32.10	642.00		0.39	250.38		
	10 mm	455	2.60	1183.00		0.62	733.46		
	8 mm	20	50.00	1000.00		0.39	390.00		
	10 mm	510	2.60	1326.00		0.62	822.12		
	8 mm	20	56.00	1120.00		0.39	436.80		
	10 mm	328	2.60	852.80		0.62	528.74		
	8 mm	20	36.00	720.00		0.39	280.80		
	10 mm	273	2.60	709.80		0.62	440.08		
	8 mm	20	30.00	600.00		0.39	234.00		
	10 mm	319	2.60	829.40		0.62	514.23		
	8 mm	20	35.00	700.00		0.39	273.00		
	10 mm	113	2.60	293.80		0.62	182.16		
	8 mm	20	12.40	248.00		0.39	96.72		
	Culverts								
	16 mm	2x29	3.40	197.20		1.58	311.58		
	12 mm	2x23	4.30	197.80		0.89	176.04		
	16 mm	2x52	3.40	374.00		1.58	590.92		
	12 mm	2x23	7.20	331.20		0.89	294.77		
	16 mm	2x31	3.40	210.80		1.58	333.06		
	12 mm	2x23	4.60	211.60		0.89	188.32		
							7801.32	Kgs	
							7.80		

Assistant Engineer 2/03
Ward No. 10

Assistant Executive Engineer
Vidyaranyapura Sub Division

ASSISTANT EXECUTIVE ENGINEER
Vidyaranyapura Sub-Division
Bruhath Bangaluru Mahanagara Palike

Sl. No.	Description of work	No.	Length	Breadth B1	Breadth B2	Breadth Avg B	Depth	Quantity	Rate / Unit
	Measurement Continued on :								
12	KSRRB M200-24. Dismantling of cement concrete pavement by mechanical means using pneumatic tools, breaking to pieces not exceeding 0.02 cum in volume and stock piling at designated locations and disposal of dismantled materials stacking serviceable and unserviceable materials seperately complete as per specifications. MORTH Specification No. 202								Cum
	For CC Road								
	Chamundeshwari Layout								
	Mla Narayanappa House road from Dead End								
		1	15.00	4.20	4.10	4.15	0.10	6.23	
		1	15.00	4.10	4.80	4.45	0.10	6.68	
		1	15.00	4.80	4.20	4.50	0.10	6.75	
		1	15.00	4.20	3.90	4.05	0.10	6.08	
		1	15.00	3.90	4.00	3.95	0.10	5.93	
		1	15.00	4.00	4.10	4.05	0.10	6.08	
		1	15.00	4.10	4.10	4.10	0.10	6.15	
		1	15.00	4.10	4.00	4.05	0.10	6.08	
		1	12.50	4.00	2.90	3.45	0.10	4.31	
	6th Main Road from Doddabommasandra Main Road to Dead End								
		1	15.00	4.60	5.30	4.95	0.10	7.43	
		1	15.00	5.30	5.30	5.30	0.10	7.95	
		1	15.00	5.30	4.80	5.05	0.10	7.58	
		1	15.00	4.80	5.30	5.05	0.10	7.58	
		1	15.00	5.30	4.90	5.10	0.10	7.65	
		1	15.00	4.90	4.70	4.80	0.10	7.20	
		1	15.00	4.70	5.00	4.85	0.10	7.28	
		1	15.00	5.00	5.00	5.00	0.10	7.50	
		1	15.00	5.00	5.50	5.25	0.10	7.88	
		1	15.00	5.50	5.20	5.35	0.10	8.03	
		1	15.00	5.20	4.70	4.95	0.10	7.43	
		1	15.00	4.70	5.20	4.95	0.10	7.43	
		1	4.00	5.20	5.20	5.20	0.10	2.08	
	Mutturayaswamy Layout								
	1st A Cross Road from SWD								
		1	15.00	6.60	7.00	6.80	0.10	10.20	
		1	15.00	7.00	7.00	7.00	0.10	10.50	
		1	15.00	7.00	6.90	6.95	0.10	10.43	
		1	14.00	6.90	6.50	6.70	0.10	9.38	
	Krishna Murthy Layout								
	1st Cross Road from Main Road to Dead End								
		1	15.00	5.60	5.70	5.65	0.10	8.48	
		1	15.00	5.70	5.70	5.70	0.10	8.55	
		1	9.00	5.70	5.80	5.75	0.10	5.18	
	Seethappa Layout								
	1st Cross L/S from Main Road to Dead End								
		1	15.00	5.90	4.90	5.40	0.10	8.10	
		1	15.00	4.90	5.00	4.95	0.10	7.43	
		1	9.00	5.00	5.00	5.00	0.10	4.50	

229.97

ASSISTANT EXECUTIVE ENGINEER
Vidyaranyapura Sub Division
Brahath Bengaluru Mahanagara Palike

Sl. No.	Description of work	No.	Length	Breadth			Depth	Quantity	Rate / Unit
				B1	B2	Avg B			
	1st Cross R/S from Main Road to Dead End								
		1	15.00	5.50	4.40	4.95	0.10	7.43	
		1	19.00	4.40	5.30	4.85	0.10	9.22	16.64
								246.61	
								240.94	

Assistant Engineer
Ward No. 10

Assistant Executive Engineer
Vidyaranyapura Sub Division

ASSISTANT EXECUTIVE ENGINEER
Vidyaranyapura Sub Division
Bruhath Bengaluru Mahanagara Palike

Sl. No.	Description of work	No.	Length	Breadth B1	Breadth B2	Breadth Avg B	Depth	Quantity	Rate / Unit
	Measurement Continued on :								
13	Excavation for roadwork in soil with hydraulic excavator of 0.9 cum bucket capacity including cutting and loading in tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transporting to the embankment location and complete as per specifications. MORTH Specification No.301								Cum
	For CC Road								
	Chamundeshwari Layout								
	Mla Narayanappa House road from Dead End								
		1	15.00	4.20	4.10	4.15	0.15	9.34	
		1	15.00	4.10	4.80	4.45	0.15	10.01	
		1	15.00	4.80	4.20	4.50	0.15	10.13	
		1	15.00	4.20	3.90	4.05	0.15	9.11	
		1	15.00	3.90	4.00	3.95	0.15	8.89	
		1	15.00	4.00	4.10	4.05	0.15	9.11	
		1	15.00	4.10	4.10	4.10	0.15	9.23	
		1	15.00	4.10	4.00	4.05	0.15	9.11	
		1	12.50	4.00	2.90	3.45	0.15	6.47	
	6th Main Road from Doddabommasandra Main Road to Dead End								
		1	15.00	4.60	5.30	4.95	0.10	7.43	
		1	15.00	5.30	5.30	5.30	0.10	7.95	
		1	15.00	5.30	4.80	5.05	0.10	7.58	
		1	15.00	4.80	5.30	5.05	0.10	7.58	
		1	15.00	5.30	4.90	5.10	0.10	7.65	
		1	15.00	4.90	4.70	4.80	0.10	7.20	
		1	15.00	4.70	5.00	4.85	0.10	7.28	
		1	15.00	5.00	5.00	5.00	0.10	7.50	
		1	15.00	5.00	5.50	5.25	0.10	7.88	
		1	15.00	5.50	5.20	5.35	0.10	8.03	
		1	15.00	5.20	4.70	4.95	0.10	7.43	
		1	15.00	4.70	5.20	4.95	0.10	7.43	
		1	4.00	5.20	5.20	5.20	0.10	2.08	
	Mutturayaswamy Layout								
	1st A Cross Road from SWD								
		1	15.00	6.60	7.00	6.80	0.10	10.20	
		1	15.00	7.00	7.00	7.00	0.10	10.50	
		1	15.00	7.00	6.90	6.95	0.10	10.43	
		1	14.00	6.90	6.50	6.70	0.10	9.38	
	Krishna Murthy Layout								
	1st Cross Road from Main Road to Dead End								
		1	15.00	5.60	5.70	5.65	0.10	8.48	
		1	15.00	5.70	5.70	5.70	0.10	8.55	
		1	9.00	5.70	5.80	5.75	0.10	5.18	
	Seethappa Layout								
	1st Cross L/S from Main Road to Dead End								
		1	15.00	5.90	4.90	5.40	0.10	8.10	
		1	15.00	4.90	5.00	4.95	0.10	7.43	
		1	9.00	5.00	5.00	5.00	0.10	4.50	

257.10

Asst. Executive Engineer
Vijayarajapura Sub-Division
Tirupathi Bengaluru Main

Sl. No.	Description of work	No.	Length	Breadth B1	Breadth B2	Breadth Avg B	Depth	Quantity	Rate / Unit
	1st Cross R/S from Main Road to Dead End								
		1	16.00	5.50	4.40	4.95	0.10	7.43	
		1	19.00	4.40	5.30	4.85	0.10	9.22	
	6th Main Road Chamundeshwari LO								
	Cross Road 1	1	17.20	4.70	4.70	4.70	0.10	8.08	
	Cross Road 2	1	16.00	4.60	4.60	4.60	0.10	7.36	
	Cross Road 3	1	15.90	4.30	4.10	4.20	0.10	6.68	
								295.87	
								289.02	

38.76

Sunitha-NL 25/02
Assistant Engineer
Ward No. 10

ASSISTANT EXECUTIVE ENGINEER
Assistant Executive Engineer
Vidyaranyapura Sub Division
Bruhath Bengaluru Mahanagara Palike

Sl. No.	Description of work	No.	Length	Breadth B1	Breadth B2	Breadth Avg B	Depth	Quantity	Rate / Unit
	Measurement Continued on :								
14	KSRRB M600-1. Construction of dry lean cement concrete mix CC1:5:10 with OPC cement @160Kgs, with 25mm and down size graded granite metal coarse aggregate at 0.86cum and fine aggregates @ 0.58cum Sub- base over a prepared sub-grade with (coarse and fine aggregate conforming to IS: 383) aggregate cement ratio not to exceed 15:1. Aggregate gradation after blending to be as per Table 600-1, cement content not to be less than 160 kg/ cum, optimum moisture content to be determined during trial length construction, concrete strength not to be less than 10 Mpa at 7 days, mixed in a batching plant, transported to site, laid with a paver with electronic sensor, compacting with 8-10 tonnes vibratory roller, finishing and curing complete as per specifications. Using concrete Batching plant at 75cum/hr capacity with fixed form paver . clause 601 of MORTH V Revision and IS 456 Table -5								Cum
	For CC Road								
	Chamundeshwari Layout								
	Mla Narayanappa House road from Dead End								
		1	15.00	4.20	4.10	4.15	0.15	9.34	
		1	15.00	4.10	4.80	4.45	0.15	10.01	
		1	15.00	4.80	4.20	4.50	0.15	10.13	
		1	15.00	4.20	3.90	4.05	0.15	9.11	
		1	15.00	3.90	4.00	3.95	0.15	8.89	
		1	15.00	4.00	4.10	4.05	0.15	9.11	
		1	15.00	4.10	4.10	4.10	0.15	9.23	
		1	15.00	4.10	4.00	4.05	0.15	9.11	
		1	12.50	4.00	2.90	3.45	0.15	6.47	
	6th Main Road from Doddabommasandra Main Road to Dead End								
		1	15.00	4.60	5.30	4.95	0.15	11.14	
		1	15.00	5.30	5.30	5.30	0.15	11.93	
		1	15.00	5.30	4.80	5.05	0.15	11.36	
		1	15.00	4.80	5.30	5.05	0.15	11.36	
		1	15.00	5.30	4.90	5.10	0.15	11.48	
		1	15.00	4.90	4.70	4.80	0.15	10.80	
		1	15.00	4.70	5.00	4.85	0.15	10.91	
		1	15.00	5.00	5.00	5.00	0.15	11.25	
		1	15.00	5.00	5.50	5.25	0.15	11.81	
		1	15.00	5.50	5.20	5.35	0.15	12.04	
		1	15.00	5.20	4.70	4.95	0.15	11.14	
		1	15.00	4.70	5.20	4.95	0.15	11.14	
		1	4.00	5.20	5.20	5.20	0.15	3.12	
	Mutturayaswamy Layout								
	1st A Cross Road from SWD								
		1	15.00	6.60	7.00	6.80	0.15	15.30	
		1	15.00	7.00	7.00	7.00	0.15	15.75	
		1	15.00	7.00	6.90	6.95	0.15	15.64	
		1	14.00	6.90	6.50	6.70	0.15	14.07	
	Krishna Murthy Layout								
	1st Cross Road from Main Road to Dead End								
		1	15.00	5.60	5.70	5.65	0.15	12.71	
		1	15.00	5.70	5.70	5.70	0.15	12.83	
		1	9.00	5.70	5.80	5.75	0.15	7.76	

ASSISTANT EXECUTIVE ENGINEER

314.92

Sl. No.	Description of work	No.	Length	Breadth B1	Breadth B2	Breadth Avg B	Depth	Quantity	Rate / Unit
	Seethappa Layout								
	1st Cross L/S from Main Road to Dead End								
		1	15.00	5.90	4.90	5.40	0.15	12.15	
		1	15.00	4.90	5.00	4.95	0.15	11.14	
		1	9.00	5.00	5.00	5.00	0.15	6.75	
	1st Cross R/S from Main Road to Dead End								
		1	15.00	5.50	4.40	4.95	0.15	11.14	
		1	19.00	4.40	5.30	4.85	0.15	13.82	
	6th Main Road Chamundeshwari LO								
	Cross Road 1	1	17.20	4.70	4.70	4.70	0.15	12.13	
	Cross Road 2	1	16.00	4.60	4.60	4.60	0.15	11.04	
	Cross Road 3	1	15.90	4.30	4.10	4.20	0.15	10.02	
								403.10	
								395.61	

Assistant Engineer 9/03
Ward No. 10

Assistant Executive Engineer
Vidyaranyapura Sub Division

ASSISTANT EXECUTIVE ENGINEER Vidyaranyapura Sub-Division Bengaluru Mahanagara Palike